

# Tianxia Xiao

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EDUCATION	<b>Princeton University</b> Aug 2017 – 2022 <ul style="list-style-type: none"><li>▪ Doctor of Philosophy in Chemistry (expected graduation 2022)</li><li>▪ Relevant courses: Mathematics for Machine Learning, Quantitative Methods in Molecular Biology, Numerical Methods for Scientific Computing, Statistical Modeling and Analysis of Neural Data</li></ul> <b>University of California, Berkeley</b> Aug 2013 – May 2017 <ul style="list-style-type: none"><li>▪ B.Sc. double major in <i>Environmental Economics and Policy</i> and <i>Molecular Toxicology</i></li><li>▪ Magna cum laude (GPA:3.9), graduated with Honors, member of Phi Beta Kappa and Kappa Alpha Pi</li><li>▪ Relevant courses: Economics of Innovation and Intellectual Property, Principle of Drug Action</li></ul>
SKILLS	Python, R, Matlab, C++, Microsoft Office, L <sup>A</sup> T <sub>E</sub> X, Research, Public Speaking
EXPERIENCE	<b>Rabinowitz Lab, Princeton University, Graduate Research Assistant</b> Nov 2017 – Present <ul style="list-style-type: none"><li>▪ Quantitatively analyze major metabolic principles in yeasts for synthetic biology applications.</li><li>▪ Design solutions for yeasts to produce high-value chemicals at low economic and environmental costs.</li><li>▪ Develop projects with collaborators in proteomics, transcriptomics, genomic modeling and engineering.</li><li>▪ Leading to three first-authored manuscripts on model and non-model yeasts in synthetic biology.</li></ul> <b>YetoFood, Founder</b> Dec 2020 – Present <ul style="list-style-type: none"><li>▪ Received \$6300 funding from the entrepreneur Lab 2021 Accelerator and Incubator at Princeton University.</li><li>▪ Develop low-carb (keto-friendly) food product at lower economic and environmental costs.</li><li>▪ Earned more than 80% positive feedback rate on pilot product via initial targeted crowd-sourcing.</li></ul> <b>TechUnited: NJ, Princeton GradFUTURES Social Impact Fellowship</b> Mar 2021 – Jun 2021 <ul style="list-style-type: none"><li>▪ Develop a data analysis framework for the survey results on business development and innovations.</li><li>▪ Summarize report on pressing topics facing the entrepreneur community in NJ.</li></ul> <b>Scholarly Communication Workshop, Founder</b> Jun 2019 – Jun 2020 <ul style="list-style-type: none"><li>▪ Awarded \$2000 funding to initiate a professional development Program for graduate students.</li><li>▪ Designed workshops for graduate students to communicate their scholarly experience in social settings.</li></ul> <b>Association of Chinese Students at Princeton University, Marketing Director</b> May 2019 – Jun 2020 <ul style="list-style-type: none"><li>▪ Recruited a marketing team for 2019-2020 and streamlined the work structure.</li><li>▪ Designed all marketing projects and composed creative marketing materials for social media publication.</li><li>▪ Co-founded a COVID-19 philanthropy project that raised over \$20,000 in donations to ameliorate early medical supply shortages in Wuhan, China, and then Princeton, USA.</li></ul>
PUBLICATION	[1] <b>Xiao, T.</b> , Khan, A., Shen, Y., Chen, L., Rabinowitz, J. D. (2021). “Glucose feeds the TCA cycle via environmental ethanol in fermenting yeast” <i>Nat. Chem. Bio.</i> , <b>In Review</b> . [2] Dinh, H. V., Suthers, P. F., Chan, S., Shen, Y., <b>Xiao, T.</b> , Deewan, A., Jagtap, S. S., Zhao, H., Rao, C. V., Rabinowitz, J. D., & Maranas, C. D. (2019). “A comprehensive genome-scale model for <i>Rhodospiridium toruloides</i> IFO0880 accounting for functional genomics and phenotypic data” <i>Metab. Eng. Commun.</i> , <b>9</b> , e00101.
PRESENTATIONS AND AWARDS	<ul style="list-style-type: none"><li>▪ Speaker at “Voices of STEM”, Council on Science and Technology at Princeton University Apr 2021<ul style="list-style-type: none"><li>• Talk title, “Raise a pitcher of ideas”</li></ul></li><li>▪ Speaker at “Research on the Road Virtual”, Princeton University Apr 2020<ul style="list-style-type: none"><li>• Talk title, “Highway to Fuel: Evidence for Metabolic Channeling to Drive Bio-Energy Production.”</li></ul></li><li>▪ Poster at U.S. DOE Office of Biological and Environmental Research Meeting Feb 2019, Feb 2020</li><li>▪ Poster at U.S. DOE Center for Advanced Bioenergy and Bioproducts Innovation Meeting Jun 2018</li><li>▪ NorCal Society of Toxicology Undergraduate Student Travel Award Mar 2017<ul style="list-style-type: none"><li>• Awarded \$400 for my national meeting poster on the pharmacodynamics of herbal medicine</li></ul></li><li>▪ NorCal Society of Environmental Toxicology and Chemistry Undergraduate Scholarship Apr 2016</li><li>▪ The International Alliance of Research Universities Summer Program scholarship Aug 2014, Aug 2016<ul style="list-style-type: none"><li>• Awarded \$800 to study at ETH Zurich World Food System Center (2016)</li><li>• Awarded \$1600 to study “Chinese Economics and International Relations” at Peking University (2014)</li></ul></li></ul>